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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/052,565	01/23/2002	Kazuhisa Tachi	217834US0CIP	6365

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OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C.
1940 DUKE STREET
ALEXANDRIA, VA 22314

EXAMINER

MIGGINS, MICHAEL C

ART UNIT	PAPER NUMBER
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1772

DATE MAILED: 06/04/2003

7

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Applicati n No.

10/052,565

Applicant(s)

TACHI ET AL.

Examiner

Michael C. Miggins

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-- Th MAILING DATE of this communication appears on the cover sheet with the corresp ndence address --

Period f r Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 June 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 January 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Pri rity under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 7.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 19 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
3. Claim 19 recites the limitation "the metallocene-base catalyst" in line 1. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-2, 9-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jiro et al. (JP Publication No. 05042944 A and English abstract provided by applicant in paper #5) in view of Jacobsen et al. (U.S. Patent Application Publication 2001/0039320 A1) and Norio et al. (JP Publication No. 07276482 A and English abstract provided by applicant in paper #5).

Jiro et al. teach a labeled resin bottle and one or more labels placed thereon and fused therewith, wherein the resin bottle comprises a mouth/shoulder (2 from Fig. 1)

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portion, a barrel portion (3 from Fig. 1) and a bottom portion (4 from Fig. 1), wherein the barrel portion has a primary curved surface, and the label is placed on such primary curved surface (see Fig. 1), wherein the primary curved surface composing the barrel portion is responsible for the start of deformation when compressive load is applied from the mouth portion of the resin bottle (since the bottle is a squeeze bottle, see abstract) wherein the resin bottle is self-standing (see abstract) (applies to instant claims 1, 10, 12-13 and 17).

Jiro et al. discloses applicant's structural limitations substantially as claimed. However, Jiro et al. fails to disclose the bottle having a major thick layer consisting essentially of a polyolefinic resin, wherein the polyolefinic resin is composed mainly of an ethylene- α -olefinic copolymer which is polymerized using a metallocene-base catalyst and has a density of about 0.850 to 0.915 g/cm³ and wherein the metallocene-base catalyst is a metallocene-alumoxane catalyst or a mixture of a metallocene compound and a compound capable of forming a stable anion by reacting therewith.

Jacobsen et al. teach a major thick layer consisting essentially of a polyolefinic resin (see claims 17-19 of Jacobsen et al.), wherein the polyolefinic resin is composed mainly of an ethylene- α -olefinic copolymer which is polymerized using a metallocene-base catalyst and has a density of about 0.850 to 0.915 g/cm³ (abstract) and wherein the metallocene-base catalyst is a metallocene-alumoxane catalyst or a mixture of a metallocene compound and a compound capable of forming a stable anion by reacting therewith (see paragraph [0233]) in a bottle (see claim 19 of Jacobsen et al.) (applies to

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instant claims 1, 14-15 and 18-19) for the purpose of maximizing toughness, modulus and impact strength.

Therefore it would have been obvious to one having ordinary skill in the art at the time applicant's invention was made to have provided a major thick layer consisting essentially of a polyolefinic resin, wherein the polyolefinic resin is composed mainly of an ethylene- α -olefinic copolymer which is polymerized using a metallocene-base catalyst and has a density of about 0.850 to 0.915 g/cm³ and wherein the metallocene-base catalyst is a metallocene-alumoxane catalyst or a mixture of a metallocene compound and a compound capable of forming a stable anion by reacting therewith in the bottle of Jiro et al. in order to provide maximized toughness, modulus and impact strength as taught or suggested by Jacobsen et al..

Claims 14-15 recite method limitations ("... produced by direct blow molding ..." and "... produced by injection stretching blow molding ...") in a product claim, thus the method limitation have been given little to no patentable weight, since it has been found that even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process. *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985).

The combined teachings of Jiro et al. and Jacobsen et al. disclose the claimed invention except for the $W/(V^{2/3})$ ratio recited in claims 1, 9 and 16. However, Jiro et al.

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teach that the thickness of the overall container body can be varied, (i.e. the ratio between the thickness at an area on the squeezeable body part on which the label is welded and the thickness of an area on which the label is not welded which is between 0.8 and 1.2), note that the overall thickness is directly proportional to the weight of the container. Jacobsen et al. teach a bottle which is made from applicant's recited polyolefin with a density of 0.870 to 0.980, note that density is also directly proportional to the weight of the bottle. Niro et al. discloses that the overall width of a bottle is variable (see abstract), note that the overall width as defined by Niro et al. (see Fig. 1(c)) is directly proportional to the fill volume. Since the thickness of the container, the density of the container (both of which are directly proportional to applicant's claimed weight of the container) and the width of the container (which is directly proportional to applicant's claimed fill volume) are all variable, one of ordinary skill in the art would have recognized that the $W/(V^{2/3})$ ratio recited in claims 1, 9 and 16 would be readily determined through routine experimentation depending on the desired end results absent some showing of unexpected results. Further, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have provided the $W/(V^{2/3})$ ratio recited in claims 1, 9 and 16 in order to control shrinkage and/or expansion and production costs while maintaining structural integrity, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges or an optimum value of a result effective variable involves only routine skill in the art (applies to instant claim 1, 9 and 16). *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

The combined teachings of Jiro et al. and Jacobsen et al. disclose the claimed invention except for the thickness ratio recited in claims 10-11. However, Jiro et al. teach that the thickness of the overall container body can be varied, (i.e. the ratio between the thickness at an area on the squeezeable body part on which the label is welded and the thickness of an area on which the label is not welded which is between 0.8 and 1.2). Jacobsen et al. teach a bottle which is made from applicant's recited polyolefin with a density of 0.870 to 0.980. Niro et al. discloses that the overall width of a bottle is variable (see abstract), note that the overall width as defined by Niro et al. (see Fig. 1(c)). Since the thickness of the container, the density of the container and the width of the container, all of which contribute substantially to applicant's claimed thickness ratio, are all variable, one of ordinary skill in the art would have recognized that the thickness ratio recited in claims 10-11 would be readily determined through routine experimentation depending on the desired end results absent some showing of unexpected results. Further, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have provided the thickness ratio recited in claims 10-11 in order to control shrinkage and/or expansion and production costs while maintaining structural integrity, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges or an optimum value of a result effective variable involves only routine skill in the art (applies to instant claims 10-11). *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

With regards to applicant's claimed stiffness and tensile elastic modulus recited in claims 1-2, such stiffness and tensile elastic modulus are provided with the combined teachings of Jiro et al. and Jacobsen et al. since Jiro et al. teach applicant's claimed bottle structure and Jacobsen et al. teach applicant's claimed materials as discussed above. Furthermore, it would have been obvious to one of ordinary skill in the art to have provided said stiffness and tensile elastic modulus in order to maximize toughness, modulus and impact strength (applies to instant claims 1-2).

6. Claims 3-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jiro et al. (JP Publication No. 05042944 A and English abstract provided by applicant in paper #5) in view of Jacobsen et al. (U.S. Patent Application Publication 2001/0039320 A1) and Norio et al. (JP Publication No. 07276482 A and English abstract provided by applicant in paper #5), as applied to claims 1-2, 9-19 above, and further in view of Yamanaka (U.S. Patent No. 5,254,302 A).

The combined teachings of Jiro et al. and Jacobsen et al. disclose applicant's invention substantially as claimed. However, neither reference teaches a label containing a polypropylene-base resin, wherein the label is capable of being used for in-mold forming, comprising a thermoplastic resin film base layer having on one surface thereof a heat-sealing resin layer which is to be faced to the resin bottle, thereby allowing the label to be fused therewith, wherein the thermoplastic resin film base layer comprises a fine porous stretched resin film containing an inorganic or organic fine powder and wherein the heat-sealing resin layer is embossed.

Yamanaka teach a label containing a polypropylene-base resin (column 8, lines 44 through column 9, line 15), wherein the label is capable of being used for in-mold forming (column 7, line 20 through column 8, line 14), comprising a thermoplastic resin film base layer having on one surface thereof a heat-sealing resin layer which is to be faced to the resin bottle (column 6, line 50 through column 7, line 5), thereby allowing the label to be fused therewith, wherein the thermoplastic resin film base layer comprises a fine porous stretched resin film containing an inorganic or organic fine powder (since polypropylene is at least somewhat porous and applicant does not recite how porous the layer must be, see column 8, lines 44 through column 9, line 15) and wherein the heat-sealing resin layer is embossed (column 6, line 13 through column 7, line 5) (applies to instant claims 3-6) for the purpose of preventing blistering and applying an in-mold label to a container of any shape.

Therefore it would have been obvious to one having ordinary skill in the art at the time applicant's invention was made to have provided a label containing a polypropylene-base resin, wherein the label is capable of being used for in-mold forming, comprising a thermoplastic resin film base layer having on one surface thereof a heat-sealing resin layer which is to be faced to the resin bottle, thereby allowing the label to be fused therewith, wherein the thermoplastic resin film base layer comprises a fine porous stretched resin film containing an inorganic or organic fine powder and wherein the heat-sealing resin layer is embossed in the bottle of Jiro et al. in order to prevent blistering and applying an in-mold label to a container of any shape as taught or suggested by Yamanaka.

7. Claims 7-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jiro et al. (JP Publication No. 05042944 A and English abstract provided by applicant in paper #5) in view of Jacobsen et al. (U.S. Patent Application Publication 2001/0039320 A1) and Norio et al. (JP Publication No. 07276482 A and English abstract provided by applicant in paper #5), as applied to claims 1-2, 9-19 above, and further in view of Dudley (EP Patent Application No. 0 254 923 A2).

The combined teachings of Jiro et al. and Jacobsen et al. disclose applicant's invention substantially as claimed. However, neither reference teaches a label with a thickness of about 40 to 250 or 50 to 200 micrometers.

Dudley teaches a label with a thickness of about 40 to 250 or 50 to 200 micrometers (page 8, lines 18-23) (applies to instant claims 7-8) for the purpose of managing production costs while maintaining a label which is not degraded by flexing and handling of the container to which the label is applied.

Therefore it would have been obvious to one having ordinary skill in the art at the time applicant's invention was made to have provided a a label with a thickness of about 40 to 250 or 50 to 200 micrometers in the bottle of Jiro et al. in order to manage production costs while maintaining a label which is not degraded by flexing and handling of the container to which the label is applied as taught or suggested by Dudley.

8. Claims 20-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jiro et al. (JP Publication No. 05042944 A and English abstract provided by applicant in

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paper #5) in view of Jacobsen et al. (U.S. Patent Application Publication 2001/0039320 A1) and Norio et al. (JP Publication No. 07276482 A and English abstract provided by applicant in paper #5), as applied to claims 1-2, 9-19 above, and further in view of Shen et al. (U.S. Patent Application Publication No. 2002/0148843 A1).

The combined teachings of Jiro et al. and Jacobsen et al. disclose applicant's invention substantially as claimed. However, neither reference teaches a bottle wherein three or more discontinuous labels are placed on the resin bottle so as to be aligned along the peripheral direction of the lateral section of the barrel portion, which comprises three or more discontinuous labels thereon.

Shen et al. teach a bottle wherein three or more discontinuous labels are placed on the resin bottle so as to be aligned along the peripheral direction of the lateral section of the barrel portion, which comprises three or more discontinuous labels thereon (paragraphs [0021] – [0024] and [0028] – [0032]) (applies to instant claims 20-23) for the purpose of providing a more striking bottle for the consumer and to provide further information about the contained product.

Therefore it would have been obvious to one having ordinary skill in the art at the time applicant's invention was made to have provided a bottle wherein three or more discontinuous labels are placed on the resin bottle so as to be aligned along the peripheral direction of the lateral section of the barrel portion, which comprises three or more discontinuous labels thereon in the bottle of jiro et al. in order to provide a more striking bottle for the consumer and to provide further information about the contained product as taught or suggested by Shen et al..

9. Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jiro et al. (JP Publication No. 05042944 A and English abstract provided by applicant in paper #5) in view of Jacobsen et al. (U.S. Patent Application Publication 2001/0039320 A1) and Norio et al. (JP Publication No. 07276482 A and English abstract provided by applicant in paper #5), as applied to claims 1-2, 9-19 above, and further in view of Giblin et al. (U.S. Patent No. 6,431,401 B1).

The combined teachings of Jiro et al. and Jacobsen et al. disclose applicant's invention substantially as claimed. However, neither reference teaches a bottle having a sectional shape of polygons higher than square and having said one or more labels placed on an edge thereof.

Giblin et al. teach a bottle having a sectional shape of polygons higher than square and having said one or more labels placed on an edge thereof (see column 12, lines 1-67) for the purpose of providing a container which will contain detergents.

Therefore it would have been obvious to one of ordinary skill in the art at the time applicant's invention was made to have provided a bottle having a sectional shape of polygons higher than square and having said one or more labels placed on an edge thereof in the bottle of Jiro et al. in order to provide a container which will contain detergents as taught or suggested by Giblin et al.

The combined teachings of Jiro et al. and Giblin et al. disclose the claimed invention with regards to the polygonal container except for the chamfered edge having a chamfering radius of 5mm or above recited in claim 24. However, Giblin et al. teach

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chamfered edges (column 12, lines 1-67). Thus, one of ordinary skill in the art would have recognized that the recited chamfering radius would be readily determined through routine experimentation depending on the desired end results absent some showing of unexpected results. Further, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have provided applicant's claimed chamfering radius in order to provide a striking container for the consumer, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges or an optimum value of a result effective variable involves only routine skill in the art (applies to instant claim 24). *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael C. Miggins whose telephone number is (703) 305-0915. The examiner can normally be reached on Monday-Friday; 1:30-10:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Pyon Harold can be reached on (703) 308-4251. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.


HAROLD PYON
SUPERVISORY PATENT EXAMINER
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6/2/03

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June 2, 2003